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ABSTRACT

Three teacher researchers conducted research to help motivate, encourage, and raise achievement of all students involved in the study. There were three fifth-grade classes involved of approximately 30 students per class, ages 10-11. The elementary school involved is located in Bolingbrook, Illinois: Wood View Elementary. The researchers conducted student and parent surveys to develop data about general perceptions toward reading. A diagnostic reading test examined where students are in three areas of reading: phonics, comprehension, and vocabulary. This same test was administered as the final posttest at the end of the study. An observation checklist, filled out by the researchers, was done bi-weekly to establish trends and patterns in classroom behaviors that go on during this study. A multiple intelligence bulletin board and reading enter was established to provide students with choice in classroom activities. The activities were changed bi-weekly as the skill and strategy focus changed in the reading curriculum. A portfolio system was put into place in the second month of the study. The information gathered by the students was assembled into a portfolio according to the checklist and rubric was designed and explained by the teacher researchers. This was an ongoing project that did not have final evaluation until the end of the study. The benefits to the students varied. The hopes were to focus on the strengths of all types of learners by using multiple intelligence strategies, and enhance weaknesses for self-discovery. Also, there was an increase in reading comprehension and skill mastery that built a stronger, more confidant, and motivated reader. The activities and specific skill reinforcement intertwined content with student choice. Based on the presentation and analysis of the data, students showed a marked improvement in reading comprehension, motivation, and student engagement. It is recommended that facilitators/teachers who want to undertake this type of intervention be aware of the commitment it takes to carry out this plan of action. Commitment involves having all necessary materials, creating multiple intelligence activities that coincide with the reading curriculum content, and allotting time for successful completion of such activities by the students. Appendixes contain a list of project expectations, parent survey, plot graph, portfolio evaluation rubric, and a project completion schedule. (Contains 22 references and 6 tables of data.) (Author/RS)

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IMPROVING STUDENT ACADEMIC READING ACHIEVEMENT THROUGH THE USE OF MULTIPLE INTELLIGENCE TEACHING STRATEGIES

ED 479 204

Jennifer Reidel
Tracey Tomaszewski
Darla Weaver

An Action Research Submitted to the Graduate Faculty of the School of Education in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Teaching and Leadership

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Field-Based Master's Program

Chicago, Illinois

May 2003

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ABSTRACT

The three teacher researchers conducted research to help motivate, encourage, and raise achievement of all students involved in the study. There were three fifth grade classes involved of approximately 30 students per class, ages 10-11.The elementary school involved is located in Bolingbrook, Illinois: Wood View Elementary. Mr. Jay Sommerfield, principal of the school granted the researchers written permission to conduct this study.

The parents/legal guardians of the involved students were well informed by the researchers of what the study entailed. A consent letter was provided to allow the students to participate. All involved were assured that all data collected was kept confidential, there is no risk to their child, and all activities was conducted in the normal course of the specified curriculum.

The researchers conducted student and parent surveys to develop data about general perceptions toward reading. A diagnostic reading test examined where students are in three areas of reading: phonics, comprehension, and vocabulary. This same test was administered as the final posttest at the end of the study. An observation checklist, filled out by the researchers, was done bi-weekly to establish trends and patterns in classroom behaviors that go on during this study. A multiple intelligence bulletin board and reading center was established to provide students with choice in classroom activities. The activities were changed bi-weekly as the skill and strategy focus changed in the reading curriculum. A portfolio system was put into place in the second month of the study. The gathered information by the students was assembled into a portfolio according to the checklist and rubric as designed and explained by the teacher researchers. This was an ongoing project that did not have final evaluation until the end of the study.

The benefits to the students varied. The hopes were to focus on the strengths of all types of learners by using multiple intelligence strategies, and enhance weaknesses for self-discovery. Also, there was an increase in reading comprehension and skill mastery that built a stronger, more confidant, and motivated reader. The activities and specific skill reinforcement intertwined content with student choice. Based on the presentation and analysis of the data, students showed a marked improvement in reading comprehension, motivation, and student engagement. It is recommended that facilitators/teachers that want to undertake this type of intervention be aware of the commitment it takes to carry out this plan of action. Commitment involves having all necessary materials, creating multiple intelligence activities that coincide with the reading curriculum content, and allotting time for successful completion of such activities by the students.

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

Students in targeted fifth grade classrooms within the middle-to-low socio-economic midwestern community exhibited a lack of reading comprehension and low academic achievement in core curriculum subjects. Evidence for existence of the problem included student surveys that provided an indication of students' choices of reading material and attitudes toward reading, assessments that indicated the level of students' academic performance, teacher observations and checklists, and parent surveys.

Immediate Problem Context

The school's student enrollment was approximately 550 students, of whom 9% were low-income status, approximately 30% were minority, and there was an 88% attendance rate. The total number of classrooms was 27, number of support personnel was 21, and there were 4 administration personnel. The average years of experience among the certified staff was 12 years, 13 staff members had advanced degrees, and the average salary for teachers was about $42,000 per year.

The school building was a one level building constructed with an open classroom concept, but reconstructed to provide a self-contained atmosphere. The curriculum was

design to be aligned with the Illinois State Standards. Although the school had a support staff, supportive parents, and a diversity of students, there were issues of overcrowding, inconsistent temperature control throughout the building, and not enough resource help or instructional materials.

The Surrounding Community

The population of the community in which the targeted school was located changed over the past 15 years. The population almost doubled. In 1986, the community had about 39,000, and by 2002, the U.S. Census reported the population at approximately 61,000. The ethnic make up of the community was 58% Caucasian, 20% African American, 13% Hispanic, and 9% other.

The median age of the citizens was 31 years of age. The gender make up was 28,000 males and 28,200 females. The average income per household was $61,000 per year. There were 6,700 new homes built since 1986.

Industrial and commercial growth impacted the community greatly with the amount of new business licenses, an increase of 305%, and 17,000,000 square feet of new industry was constructed. The community had another 16,000,000 square feet still available for future growth. This impact created 19,000 new jobs.

With that type of growth in residential and commercial areas, specific issues such as traffic, crime, and tax increases were created. The community had to take control of these issues to keep the area safe and under control. There were many things done to improve these issues over the years to achieve safety and control within the community.

The community increased the number of traffic lights to help control the smoothness of travel. There were also lane expansions created in more heavily traveled

areas of town. These improvements had also helped the percentage of accidents that had taken place throughout the town.

To improve and control crime within the community different programs were introduced to help keep the citizens better informed. They created public crime awareness programs such as the Citizens Police Academy, the Neighborhood Watch Program, and the C.O.P.S. program. These were popular and effective programs that lowered the amount of crime within the community. Finally, because of the residential, industrial, and commercial growth throughout the community, the property taxes for the community decreased dramatically.

National Context

The National Institute of Child Health and Human Development (NICHD as cited in Lyon, 1999) was created in1965. Its major function was to conduct research in reading development. After 20 years of research, the clear factual conclusion that extensive reading difficulties exist became evident to the general public, and in 1985 the Health Research Extension Act resulted. This act charged the NICHD to conduct long-term prospective and multidisciplinary research into the area of reading deficiencies.

Along with these conclusions, the National Reading Panel reported that a combination of teaching phonics, using diverse instructional strategies, and giving feedback on oral reading were the most effective ways to teach reading, (as cited in National Reading Panel, 2000). The targeted fifth grade students demonstrated low academic achievement in core curriculum material. These low reading scores appeared to be the consequence of inadequate interpretation skills and strategies needed to understand the context.

Reading affects all areas of one's life from childhood to adulthood. As reported by NICHD, 40% of the population has severe reading problems that hinder their enjoyment of reading. Reading problems, if not addressed, do not diminish over time. Such reading problems often continue into adulthood because the right interventions have not been made to change the level of difficulty individuals had in reading. A 20% cutoff was put into effect to begin labeling individuals as disabled in basic reading skills. The main difference between those considered disabled and poor readers was based on the severity of the reading problem.

The effects of reading deficiencies are vast. It is a difficult task to separate disabilities and poor readers. The NICHD found the inability to decode single words was the most reliable indicator of reading deficiencies. On the other hand, the need to compare reading ability to general academic performance is necessary. Listening comprehension, verbal expression, mathematics, and written expression are the other areas in need of exploration. Relying on intelligence or achievement is not considered a key element when labeling a person reading disabled.

Poor self-concept is another effect of poor reading abilities. According to Gambrell (1996), individuals with a low self-concept spend less time reading for enjoyment. Therefore, the accountability for students' self-worth and reading abilities falls on the teachers and authority figures in each individual's life. If teachers and other influential people spend more time helping those individuals choose books they will be interested in, the more motivated they would become. Furthermore, it is suggested that if those individuals with reading difficulties do not, usually learn to communicate ideas and perspectives to read, write, calculate mathematically, or use reason to solve problems.

In conclusion, several studies have discussed the reasons and issues for reading deficiencies; for example, lack of life experiences, unknown strategies and reading skill deficiencies, and discouragement towards reading affect a student's willingness to read. However, there are many ways to motivate the desire to read. It is the responsibility of the educator to find strategies and methods to meet the unique needs of all readers. The student will become a more developed and efficient reader when teachers learn to motivate through techniques that meet individual values, needs, or desires of the reader, (Gross-Davis, 1999).

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

Many students in the targeted fifth grade classrooms were not motivated to meet or to exceed expectations in reading comprehension on classroom assignments, district tests, and state evaluations. The students did not meet or exceed assignment requirements, engage in self-selected reading materials, demonstrate a foundation of reading strategies, self-correct fluency, vocabulary, and comprehension strategies, or use higher-order thinking skills to respond to open-ended questions.

One of the first indications that the fifth grade population was lacking reading comprehension skills occurred after evaluation of a parent survey. This survey contained a variety of questions that pertained to student and parent perceptions toward reading. In reviewing the results 15%, of the parents did not read to the student, and 45% of the parents stated that their child would not read without parental encouragement.

Through teacher observation another indication transpired. Many of the students upon returning from the library would either place the checked out book into the return bin, or not check out a book at all. Classroom discussions revealed that students were not

interested in reading, and took a book to avoid difficulty with the librarian. As a group, the students came to the consensus that there were no "good" books in the library. Therefore, the many students lacked intrinsic motivation to read.

However, the largest indication of the students' lack of strategies and skills in reading comprehension were the results of previous assessments. Twenty-seven of the students had been placed on academic warning by the state of Illinois, or approximately one-third of the fifth grade class.

Probable Cause

There are many reasons to try to explain why students were not motivated to meet or exceed expectations in reading comprehension on classroom assessments, district tests, and state evaluations. The lack of necessary skills to self-select reading materials, not relating that material to their own lives, lack of strategic reading skills, and the changing demographics of families and the community apparently played a part in the problem.

The lack of necessary skills to self-select reading materials was a problem for the targeted fifth grade students. The students needed to be taught the skills to enable them to choose appropriate materials for themselves. Reading the back cover of a book or choosing topics that interested them was a difficult task for them to master. After weeks of practice the students' self-selected materials that were at their reading levels and that had a connection to their own lives. The importance of this skill will be important in their school careers and throughout their lives in general.

Many students did not see the relevance of the material being studied or were unable to relate the material to events in their lives. The curriculum did not focus on the connections real life experiences the students had in their lives. The students needed to

focus on reading as a true learning experience rather than just another assignment. Students needed to share things they had done that were related to materials they studied. Through this process true learning would occur.

By the time students reach fifth grade teachers expect them to have the skills needed to read strategically for better comprehension and transfer. Unfortunately this was not true for all targeted students. The lack of strategic reading skills caused many students to not participate in class or test well. The need for students to learn and practice strategic reading skills is essential to their reading experiences.

The changing demographics of the family and community often determine the effects on the students' learning capabilities. Many new students entered the district at different ability levels. These levels of ability may have been influenced by their family situations or the lack of resources the school had to offer because of the unanticipated growth within the community. Many outside factors affected how students performed in areas of the curriculum, but showed mostly when it came to reading.

Successful readers are active learners. These students engage in metacognitive activities that give them understanding of text. They possess and use pre reading and post reading strategies. While reading, however, many students lack knowledge and strategies and tend to be inattentive, passive, and disorganized. These characteristics may be related to their failure to comprehend what they read (Collins, Dickson, Simmons, & Kameenui, n.d.).

Other students may need further development with literacy skills. They need instruction and guidance to decipher different types of reading text, and the different purposes for reading such materials (Templeton, as cited in Modeling, 1993). The

development of implicit and explicit skills is important to a struggling reader. They may need implicit modeling to show reading of the text, understanding the meaning of the text, and the purpose for reading such information. They may need explicit modeling to show how to tackle the reading task, or the students may be deficient in both areas.

Many students lack the motivation and engagement it takes to comprehend text. Intellectual growth and development are stimulated by how students are taught (Norden, as cited in Lumsden, n.d.). Students' attention and interests have changed over the past four decades. Today, television, videos, virtual reality games, computers, and other technological advancements surround students. These devices have changed the world irrevocably. For the most part, the engagement in the classroom learning has not kept up with these innovations (Lumsden, 1999).

Students may possess the need for diversified instruction. Gardner (as cited in Laughlin, 1999) suggested that students' intelligence is the product of their culture. Students may have different building blocks of intelligence that give them the ability to solve problems. These students may need to manipulate subject matter through multiple senses to achieve maximum comprehension.

There are several underlying causes for reading deficiencies across the curriculum. According to the National Institute of Child Health and Development (NICHD) research, almost half of the population have reading difficulties severe enough to hinder enjoyment of reading (Grossen, 1997). The majority of students must possess a strong knowledge base that encompasses the skills and strategies necessary to read, comprehend, and apply text across the curriculum and throughout the many facets of their lives.

CHAPTER 3

THE SOLUTION STRATEGY

Literature review

After reviewing the literature concerning the lack of students' to meet or exceed expectations in reading comprehension on classroom assessments, district tests, and state evaluations, research suggests several key strategies for increasing the students' interests, abilities and motivations. The researchers of this project focused on phonics skills, the engagement of individuals in the learning process, the theory of multiple intelligences, and metacognition to improve reading achievement.

Reading has been and will always be the basis for every child's learning. It has been the main educational focus for more than 100 years (Samuels & Kamil, as cited in Johnson, 1999). The two most important components of reading instruction are the teaching of phonics skills and the development of comprehension strategies. These two components provide the foundation for producing effective and successful readers.

Phonics, taught with a skill-based approach, was encouraged by Jeanne S. Chall (Snow, Burns & Griffin, as cited in Johnson, 1999). In 1967, Chall identified and concluded that there are "consistent and substantial advantages to programs that included systematic phonics" (Snow, Burns, & Griffin, as cited in Johnson 1999, p. 1). Phonics is

the teaching of letter sound relationships taught in a regulated approach (Diegmueller, as cited in Johnson, 1999). According to Kenneth S. Goodman, a leader in the structure and understanding of language, phonics is learned when students are saturated in reading. Therefore, students learn to figure out words by their own understanding (as cited in Samuels & Karmil, 1984).

In 1996, Marilyn J. Adams enhanced Chall's conclusions with her research in the book, Beginning to Read: Thinking and Learning About Print. Chall and Adams concluded that beneficial reading instruction depends on regular specific phonics lessons and extensive opportunities using a variety of reading materials (Snow, Burns, & Griffin, as cited in Johnson, 1999).

According to North Central Regional Educational Laboratory, phonics skills are introduced with sound-letter relationships learned first, followed by understanding. Teaching regularly scheduled phonics skills is essential for students' reading development. If students lag behind, without elaborate intensive remediation to renew lost growth, each month and each year has proved that they may fail (Rashote, Torgesen, &Wagner, as cited in Torgesen, 1998). The connections between phonics and "sight word" reading skills emphasize that phonetic reading skills are essential for memory of spelling and are the foundation for sight word knowledge (Ehri, Share, & Stanovich, as cited in Torgesen, 1998).

Experts agree that students' needs are very different than ever before. Lumsden (1999) stated "What may have held students' attention forty years ago is not necessarily going to keep today's students interested and engaged in classroom learning" (p. 1). It is a fact that television, videos, computers, and other technological advances have changed

and altered the world significantly and irrevocably.

For the purpose of this study, the researchers defined motivation as the engagement of an individual in the learning process. The definition for engagement is the ability for one's work to stimulate curiosity, one's persistence in work despite challenges and obstacles, and one's visible enthusiasm in accomplishments (Strong, Silver, & Robinson, 1995). Many factors affect a student's motivation to work and to learn: interest in the subject matter, perception of its usefulness, and general desire to achieve. Along with the stated factors, self-confidence and self-esteem are important characteristics of one's character to maintain motivation (Gross-Davis, 1999).

There is little, if any, disagreement between the expert researchers as to the factors previously discussed. However, the controversy over intrinsic and extrinsic motivation, on which theories of educational motivation have been established, is often debated (Strong, Silver, & Robinson, 1995). For the purpose of this research project, extrinsic motivation is defined as using external motivators, such as grades or stickers. On the other hand, intrinsic motivation is defined as something that comes from within. An example of this would be self-gratifying, such as a job well done.

The researchers of this action project believed motivations to be a part of the problem instead of the solution. It has also been revealed through research that highly motivated individuals possess both types of motivation (Gross-Davis, 1999). Researchers identified aspects of teaching and learning situations that may enhance student motivation. The constructivist perspective is based on the theory of making connections between prior knowledge and context. This perspective creates meaning for the reader. The readers are active learners and must engage themselves by connecting personal

knowledge and previous experience to new ideas or facts. This type of engagement has seemed to create meaning to the reader (Kowalewski, 2001).

One teaching strategy that has seemed to motivate students to read is the use of whole language in the classroom to teach reading. Whole language goes beyond skill development, and provides content that is meaningful in learning. This approach fosters authentic activities that create value in reading and writing. Students get more opportunities to engage in the reading process using this strategy (Kowalewski, 2001).

Another strategy that may be effective is students' freedom to choose their reading material. Over 80% of children involved in a reading motivation study by Gambrell (1996), which found that choosing books was related to high comprehension scores. The culture of a classroom should encourage and provide self-selection, along with modeling of strategies for reading comprehension, can lead to positive self-concept for the reader.

Many current theories recognize that social interaction creates reading motivation. Classroom discussions with peers, student book talks, and read-alouds are additional strategies that teachers can use to promote reading motivation for children. Gambrell (1996) stated that research shows these types of social literature interactions provide meaning to literacy context.

All students learn differently. Teachers need to find the right strategies to fit the diverse learning styles of each individual within the classroom setting. In order to achieve the skills necessary, such as student metacognition, thinking about one's own thinking, and motivation to read, the eight multiple intelligences need to be incorporated into everyday classroom learning. According to Gardner, the most important gifts educators

can give students are the skills necessary for them to be independent learners (as cited in Laughlin, 1999).

Gardner claimed all human beings have multiple intelligences to be nurtured and enhanced, or ignored and weakened. For the purpose of this research, "intelligence is defined as the ability or set of abilities to allow a person to solve a problem or fashion a product that is valued in one or more cultures" (Tapping into M.I., 1999). The eight multiple intelligences described by Gardner are:

1. Verbal-Linguistic Intelligence– words used effectively. These learners have strong auditory skills and think in words. These students enjoy reading, playing words games, or writing original poetry or stories.

2. Logical-Mathematical Intelligence -- ability to calculate, reason, and think abstractly. These students enjoy experimentation, solving puzzles, or asking "cosmic" questions.

3. Visual-Spatial Intelligence – thinking in pictures and images and visualize in the abstract. These students enjoy drawing, jigsaw puzzles, reading maps, and may tend to daydream.

4. Musical Intelligence -- appreciate and show sensitivity to rhythm and sound. These students enjoy music and the sounds in their surrounding environment.

5. Bodily-Kinesthetic Intelligence -- using the body effectively and a keen sense of body awareness. These students enjoy movement, making things, and handling objects skillfully.

6. Intrapersonal Intelligence – self-aware and in tune with inner feelings, values, beliefs, and thinking processes. These students tend to shy away from others and

enjoy self-reflection, and privacy.

7. Interpersonal Intelligence -- ability to appropriately detect and respond to the moods, motivations and desires of others. These students tend to have many friends, and enjoy group activities and dialogue.

8. Naturalist Intelligence -- demonstrate and expertise in recognizing and categorizing plants, animals, and other objects in nature. These students enjoy the outside environment and enjoy categorizing new and unfamiliar organisms.

(Lane, 2001, p. 3)

The theory of multiple intelligences has appeared as a major strategy to improve students' achievement across the curriculum, including students with IEPs and lower achieving students (Geimer, Getz, Pochert, & Pullman, 2000).

Gardner suggested that specific functions come from different regions in the brain and the mind's problem solving capacities are multifaceted and can work independently or together. Students possess all intelligences in varying amounts, but each student has a different intellectual composition. By improving and identifying all intelligence strengths and weaknesses, the intelligences may actually define the human species (Tapping into M.I., 1999).

The benefits of considering the use of the multiple intelligences in the classroom can be defined in many ways. One may regard intellectual ability more broadly, parent and community involvement may increase, and students may be able to demonstrate and share their strengths. When educators teach for understanding, students benefit from fulfilling and positive educational experience and create a higher self-worth and esteem. This may give students the capability to create solutions to problems in all aspects of life

and become balanced individuals who can function successfully as members of their culture (What is the Theory, n.d.). Educators used to focus on the negative and what students were unsuccessful in instead of focusing on optimizing learning power. By using the multiple intelligence theory this can be achieved.

The researchers of this action research project have dealt with a wide range of individual differences among students on a daily basis. Educators need to develop each student's talents early in life and apply the theory of multiple intelligences in ways appropriate for students, school, and community. There are a variety of ways to incorporate the intelligences in to the classroom setting. Educators may use multiple intelligences as entry points into the lesson, or engage all intelligences into their lessons. Reflection on the concept that teaching and identifying the intelligences within the classroom promotes self-directed learning. This prepares students for their adult lives by teaching them how to initiate and manage complex projects, how to ask researchable questions, identify varied resources, create realistic time lines, and bring closure to learning activities. The results demonstrated higher-order thinking skills, generalize what students learn, provide examples, and connection of content to the student's personal experiences and application of knowledge to new situations. The theory of multiple intelligences does not suggest a complete overhaul of the curriculum, but provides a framework to follow for enhancing instruction and a language to describe one's efforts (Campbell, 1997).

Each person has unique cognitive abilities. There were long lasting positive effects on the students that experienced success. As faciliators/researchers of this action project recognition individual differences was made in the accommodations to build upon

each child's ability to focus on their learning styles. Individually can result in increased skill knowledge, thorough metacognition, and more motivated students overall (Loria, 1999). The theory of multiple intelligences is not based on how smart a student is, but how the student is smart, and that each student possesses special strengths and talents that others may not. According to Gardner's work, intelligence is not fixed, it is not according to IQ as much as ability and skill, and each student can use, develop, and improve intelligence (Laughlin, 1999). Using all modalities in cooperative contexts can be optimal for most children, and the most powerful way for children to be successful is to focus on the connection between teacher expectations and student learning (Campbell, 1997). "The Multiple Intelligence theory continues to open the minds of educators, psychologists, learners and parents as how learning and education can be changed so that all persons may be guided to achieve their maximum potential" (Lane, 2001, p. 2).

Furthermore, effective reading instruction should involve metacognition. A simple definition of metacognition is "thinking about thinking" (Livingston, 1997). However, a true definition of metacognition is much more complex. This is partly because many other terms have been used interchangeably with metacognition such as self- regulation, executive control, and meta memory. While there are some slight differences between the terms, all of them stress decision making processes and regulating the way one processes cognitive information.

One way that reading comprehension can be enhanced for students is through teaching metacognition techniques. When working with metacognition and reading comprehension, the more accurate term to use is metacomprehension. Scalzo (n.d.) wrote that "metacomprehension refers to readers' awareness and self-control of their

understanding and of strategies that facilitate comprehension" (p. 249). Students who comprehend well know about different intentions for reading, regulate their own knowledge to various reading tasks, examine their comprehension, and put into practice counteractive strategies when their own comprehension fails. However, poor readers may not be aware that they should check their comprehension because they do not possess the strategies to do that.

There are various guidelines to follow when teaching metacomprehension. First of all, the students choose the reading material to improve their own comprehension. Afterward, students should mirror modeling strategies "good readers do to make sure that they understand what they are reading" (Ransone, 2002, p. 1). The reading material chosen should be slightly challenging. This is important because if the reading material is too easy, the students' comprehension would not improve or be challenged. The students should be able to predict what they think may happen and why they think that way. Reading together, focus on a sentence that has an unfamiliar word for a majority of students. The students should stop and reread the sentence again and come up with a prediction of the definition. If the students are unable to do this, by continuing to read, the unfamiliar word will probably make sense later. Furthermore, teachers should encourage students to take risks and guess if needed. This will benefit students because the students who guess "are more likely to recognize the importance of making an effort to understand the text, that is they may be more likely to use intervention strategies when misunderstanding occurs" (Scalzo, n.d. p. 1).

Growth of metacognition procedures can be recorded in journals. In journal writing, students can, in their own words, reflect on strategies used with comprehension,

as well as, how much thought was put into each entry. The journaling can help teachers see where the students need to improve in reading comprehension and metacognition.

Since many students in the targeted fifth grade classrooms were not motivated to meet or exceed expectations in reading comprehension, the researchers of this project had chosen to use district and state standardized test data, surveys, checklists, classroom assessments, and observations over a period of time to document student growth. The implementation of multiple intelligence strategies to raise reading comprehension achievement was used to motivate student thinking and aid in the students' ability to their own reading material, demonstrate a foundation of reading strategies, self-correct fluency, vocabulary, comprehension strategies, and use higher-order thinking skills to respond to open-ended questions.

Project Objectives and Processes

As a result of using multiple intelligence teaching strategies during the period from September 2002 through December 2002, the targeted fifth grade reading students will increase their reading achievement and use effective reading skills as measured by teacher observation, assessments, parent and student attitude surveys, checklists, and portfolios.

In order to accomplish the project objective, the following processes are necessary:

1. Design lesson plans using multiple intelligences.
2. Design assessments, surveys, and checklists to measure reading skill achievement.
3. Develop reading centers using multiple intelligences to provide student choice and stimulate student motivation.

Project Action Plan

I. Data collection (September)

- A. Conduct parent survey
- B. Conduct student attitude survey
- C. Conduct student multiple intelligence survey
- D. Pre-test students for reading placement (phonics, vocabulary, & comprehension)
- E. Score pretest

II. Establish multiple intelligence reading center

- A. Bulletin board and reading center
  - 1. Introduce bulletin board
    - a. Establish file folders containing activities one file for each intelligence

b. Supply materials needed for students to complete activities

c. Model each intelligence

2. Implement use of bulletin board/reading center

a. Schedule groups for weekly sessions

b. Introduce rules for center use

c. Model practice and procedures for center use

III. Initial Intervention-weekly skill/strategy focus (September-December)

A. Introduction of themes in six-week blocks (September-ongoing)

1. Pretest skills and strategies

2. Introduce and model skills and strategies (bi-weekly)

3. Guided practice of skills and strategies

4. Multiple intelligence activities (individual activities changed bi-weekly)

5. Posttest skills and strategies

6. Enter self-chosen artifacts in portfolio

7. Reflect on understood skill (bi-weekly)

IV. Initiate student portfolio (October-ongoing)

A. Set up portfolio system

1. Provide storage/organized area

2. Demonstrate purpose for portfolio

3. Begin students' artifact collection through participation of multiple intelligence activities and scholastic growth

V. Assessments/evaluations (September-ongoing)

A. Diagnostic pretest (September)

B. Give weekly story evaluations

C. Give bi-weekly skill/strategy pretests and posttests

D. Multiple intelligence assessments (rubrics-bi-weekly)

E. Portfolio evaluation rubric

F. Final diagnostic posttest (same as pretest-December)

Methods of Assessment

In order to assess the effects of the intervention, assessments covering the content and skills for reading were given as developed by the district and basal series. In addition, portfolios of student work were kept throughout the intervention period to show student growth and mastery of material. Scoring rubrics were developed for multiple intelligence assessments as well as the portfolio evaluation. Parent and student attitude surveys and observation checklists were developed by the facilitators/researchers as part of the assessment process.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this project was to motivate fifth grade students to meet or to exceed expectation in reading comprehension on classroom assignments, district tests, and state evaluations. The implementation of multiple intelligence learning theory and student's choice were the foundation for motivation and change in students' perception of reading.

The multiple intelligence theory was used to teach reading comprehension, reading strategies, self- correct fluency, vocabulary, and higher order thinking skills to respond to open-ended questions. The skills and strategies were introduced through students' reading material choices. These choices were promoted to increase positive attitudes toward reading. Assessments that indicated the level of students' academic performance, facilitator/researcher observation, and checklists were also used track student selection and growth. The structure was created through the eight multiple intelligences. Specific activities were developed to represent each learning facet. In preparation for these activities, the facilitators/researchers discussed and planned specific modifications that enhanced the district reading curriculum. These alterations aligned

strategies and skills fundamental to the comprehension of grade-level reading material.

The process of establishing specific activities commenced prior to student involvement. Each facilitator/researcher focused on two particular intelligences, in order to maintain qualities of expertise for each planned activity. Facilitators/researchers shared activities to create consistency throughout the intervention. Multiple intelligence activities were incorporated into student learning through an individualized portfolio, major/minor projects, and skill specific lesson reinforcement. In order for mastery of all components in reading, by the students, the facilitators/researchers allotted a two-week time span for students to focus on the skill and strategy being taught. This allotment of time was used to engage prior knowledge, pretest and posttest the introduced text content and skill focus, student completion of two major and four minor projects, and organize materials in a personal portfolio. Project expectations can be found in Appendix A. Original implementation of the plan was five ninety-minute sessions per week. These sessions took place in the morning and consisted of direct instruction, small group participation, and independent engagement. More specifically, 15 major project choices and 10 minor project choices were provided for the students to focus on their multiple intelligence strengths.

After the initial contact for permission, a parent attitude survey was distributed and returned. The parent survey can be found in Appendix B. Diagnostic pretesting of reading level occurred the third week of school along with a multiple intelligence survey. This survey provided students the knowledge and understanding of the individual strengths and weaknesses. To reinforce comprehension, the students graphed the results of the survey. The graph sheet used can be found in Appendix C. The following week,

facilitator/researcher presented the outline and expectations for completion of the intervention timeline.

During the first four weeks of the intervention facilitator/researcher observation of students' checklists, the story skills and activities introduced were successfully accomplished by 60% of the students. However, due to the 40% of insufficient outcomes, the facilitators/researchers found it necessary to decrease the number of major projects from two to one. Furthermore, the number of student choices were narrowed to four, which was decreased from the original amount of 15, while the minor project choice total stayed the same. The same time allotment for completion of required activities was provided. Simultaneously, the facilitators/researchers began desegregating the collected data.

After evaluation of the school calendar, the facilitators/researchers concluded there were only 15 teachable days in the month of December. Through observation, student focus, and quality of student output decreased as well. In consideration of these factors, the facilitators/researchers decided to uphold the integrity of the intervention while not compromising the expected quality from the participants. Therefore, another change in requirements and expectations became necessary. The new expectations changed in that the students were required to complete one major, high quality project and three minor projects. The rationale for the decrease in choices was that many of the projects overlapped intelligences and an effective learning and assessment would still be acquired.

At the conclusion of the intervention, facilitators/researchers administered the diagnostic posttest and evaluated student portfolios according to the rubric found in

Appendix D. To assess student achievement, facilitators/researchers desegregated data to determine the results of the intervention.

Presentation and Analysis of Results

In order to assess the effects of the multiple intelligence intervention, an initial baseline of parental opinion of students' attitude toward reading was established. The data were desegregated and presented in Table 1.

Table 1

Parent Perspective Reading Survey

Questions	Always	Often	Sometimes	Never
Do you ever read with your child?	0	31	10	32
Does your child read independently without your encouragement?	0	40	4	29
Are books and magazines available in your home for your child to read at his/her reading level?	0	72	1	N/A
Does your child visit the public library?	16	35	11	11
How much does your family enjoy reading?	31	26	5	1

A parent survey was distributed to 83 parents. Table 1 conveys the results of a survey given, and the response received was from 73 out of 83. The results shown in Table 1 are a reflection of 5 questions asked on the survey. The first question asked was "Do you ever read to your child?" Parent feedback illustrated that many of the parents read to their child, while almost as many did not read to their child. The second question

asked " Does your child read independently without your encouragement?" Parent feedback inferred that 40% of the students did not read unless encouraged. The following results to the question " How often does your child visit the public library?" The choices were always, often, sometimes, or never. The reply reported 70% went quite frequently while 30% did not take trips to the library. The final question represents combined data from two additional questions completed in the parent survey. The information reflects parent perceptions toward reading on the behalf of themselves and their child. The results from three of the questions reflected the exact same perceptions for reading. The other two questions responded very similar. The data seemed to show a relationship between the parents' feelings toward reading in that they answered the questions pertaining towards their child's perception of reading with either the exact same response or similar choices.

Table 2

Story Comprehension Pretest Results

	Meets/exceeds	Below 74%	Non Participating
Story 1	54	15	4
Story 2	47	25	1
Story 3	34	34	5
Story 4	37	35	1
Story 5	24	50	9

The students were given a biweekly pretest for each of the five stories included in the intervention. The pretests consisted of 10 multiple-choice questions, as well as two short answer questions. The content of the questions included comprehension, vocabulary, and skill references. Table 2 represents the results of the pretests for each of the five stories. The data collected were aggregated into three categories: meets/exceeds, below 74%, and non-participating. The non-participating category included children that were absent for a significant amount of time during each part of the intervention. During the first week of the intervention, a pretest was given for Story 1. The pretest results were the baseline data for the evidence of the problem. The conclusion made by the facilitators/researchers was that comprehension strategies and corresponding skills were lacking in the fifth grade population.

Table 3

Story Comprehension Posttest Results

	Increased	Same	Decreased	Non Participating
Story 1	45	14	9	5
Story 2	30	22	19	2
Story 3	59	1	8	5
Story 4	43	16	14	0
Story 5	55	11	7	0

The students were given a biweekly posttest for each of the five stories included in the intervention. The posttests mirrored the pretest with questions that included

comprehension, vocabulary, and skill references. Table 3 represents the results of the posttests for each of the five stories. The data collected were desegregated into four categories: increased score, same score, decreased score, and non-participating. Again, the non-participating category included children that were absent for a significant amount of time during each part of the intervention. Throughout the intervention, growth ranged from 73% to 90% depending on the story. Growth is represented by student scores that either increased or stayed the same. The facilitators/researchers conclude that growth during the intervention occurred through many avenues.

One avenue taken to improve comprehension was exposure to the pretest. The pretest allowed the students to preview the upcoming text information. This preview gave them the opportunity to achieve higher scores on the posttest. Time spent on in-depth classroom discussions of character, setting, plot, was another intervention practiced. Since the students had an additional week to discuss the story elements, students were more familiar with the specific details of the story. Time was an essential part of the intervention's success. Along with the comprehension focus, students chose several activities to reinforce understanding. Through these activities student participation and motivation increased. Some of the motivators included the following: the students read into tape recorders, listened to a professional reader present the text, and focused their learning through the a multiple intelligence outlet.

Table 4

Skill Pretest Results

	Meets/exceeds	Below 74%	Non Participating
Inference	26	33	14
Draw Conclusions	46	23	4
Compare/contrast	56	14	3
Sequence	32	41	0
Cause/effect	36	37	0

The students were given a biweekly pretest for each of the five skills pertaining to the 5 stories included in the intervention. The pretests consisted of various supplemental materials that focused on a specific skill. Table 4 represents the results of the pretests for each of the five concentrated skills. The data collected were desegregated into three categories: meets/exceeds, below 74%, and non-participating. The non-participating category included children that were absent for a long period of time during each part of the intervention.

Table 5

Skill Posttest Results

	Increased	Same	Decreased	Non Participating
Inference	38	8	16	11
Draw Conclusions	30	22	17	4
Compare/contrast	62	1	8	2
Sequence	43	16	13	1
Cause/effect	55	11	5	2

The students were given a biweekly posttest for the five skills pertaining to the five stories included in the intervention. The posttests mirrored the pretests, which consisted of various supplemental materials that focused on a specific skill. Table 5 represents the results of the pretests for each of the five concentrated skills. The data collected were desegregated into four categories: increased score, same score, decreased score, and non-participating. Again, the non-participating category included children that were absent for a significant amount of time during each part of the intervention. During the second week of the intervention, a posttest was given for the inference skills. Out of the 73 students participating, 38 out of 73 increased, 8 out of 73 scored the same score on the pretest, 16 out of 73 decreased, and 11 out of 73 did not participate. The fourth week of the intervention, a pretest was given for drawing conclusion skills. Student results showed 30 out of 73 increased, 22 out of 73 scored the same on the pretest, 17 out of 73 decreased, and 4 did not participate. The sixth week of the intervention a pretest was given for compare/contrast skills. The table reflects 62 out of 73 increased, 1 scored the

same on the pretest, 8 out of 73 decreased, and 2 out of 73 did not participate. The eighth week of the intervention a pretest was given for sequence skills. Student results reflected 43 out of 73 increased, 16 out of 73 scored the same on the pretest, 13 out of 73 decreased, and 1 student did not participate. During the tenth week of the intervention a pretest was given for cause/effect skills. Data collected showed 55 out of 73 increased, 11 out of 73 scored the same on the pretest, 5 out of 73 decreased, and 2 students did not participate. Throughout the intervention, growth ranged from 74% to 93% depending on the skill. Growth is represented by, student scores that either increased or stayed the same.

Table 6

Diagnostic Pretest and Posttest Results

	Pretest	Posttest
Meets/exceeds	60	62
Below 74%	11	6
Non-Participating	2	5

The students were given a diagnostic pretest to determine students' levels in phonics, vocabulary, and reading comprehension. The pretest consisted of 10 questions in phonics, twenty-five vocabulary questions, and four short stories with 24 total comprehension questions. Table 6 represents the results of the pretest and posttest for grade level determination. The data collected were desegregated into three categories: meets/exceeds, below 74%, and non-participating. The non-participating category included children that were absent for a significant amount of time during the intervention. Out of the 73 students participating, 60 out of 73 met/exceeded, 11 out of 73

scored below 74%, and 2 out of 73 did not participate. The students were given the posttest the twelfth week of the intervention. Student results showed 62 out of 73 met/exceeded, 6 out of 73 scored below 74%, and 5 out of 73 did not participate. Throughout the intervention, growth ranged from 85% to 91%. Growth over the intervention was determined by, the students taking the same diagnostic test involving phonics, vocabulary, and reading comprehension.

Conclusions and Recommendations

Through the individual multiple intelligence survey, the outcomes led the students to choose activities pertaining to their strengths. The activities and specific skill reinforcement intertwined content with student choice. Based on the presentation and analysis of the data, students showed a marked improvement in reading comprehension, motivation, and student engagement.

Academic achievement was marked by comparing pretest data to posttest data. Student choice aided in the transfer of knowledge in both specific skills and reading comprehension strategies. Through this increase in knowledge, the students became more involved in reading the text. Due to the increase in text involvement, students became more motivated learners. The freedom to choose, along with activities that enriched and enhanced the students' performance, helped create a successful experience, and engaged-learners.

A mixed review from the facilitators/researchers stemmed from this intervention. The unique make-up of each class played a big part in some of the pitfalls and successes of the intervention. It was observed that particular students' characteristics or attitudes toward reading changed in a positive manner. This was a result of the variety and

creative activities offered. Students at some levels had the capabilities to organize, self direct, and work independently, whereas other at-risk students had difficulty getting started and staying on task.

It is recommended that facilitators/teachers that want to undertake this type of intervention be aware of the commitment it takes to carry out this plan of action. Commitment involves having all necessary materials, creating multiple intelligence activities that coincide with the reading curriculum content, and allotting time for successful completion of such activities by the students.

A modification to this plan would be to create theme-oriented multiple intelligence activities in lieu of story activities. This would allow the facilitators/teachers to allot more time to focus on strategy and skill development. Students would then be able to produce quality and more insightful results.

The facilitators/researchers believed in the final analysis of the intervention, that it was an effective approach to teaching reading. This approach allowed students to learn metacognitively while learning about one's individual strengths and weaknesses through creative choices. In turn, this allowed for individuality in their learning process. Giving the students the freedom to choose drives their success in the educational process and life.

References

Campbell, L. (1997). Variations on a theme. Educational Leadership 55 (1).

Collins, V.L., Dickson, S.V., Simmons, D.C., & Kameenui, E.J.(n.d.) Metacognition and its relation to reading comprehension: A synthesis of the research. Eugene, OR: University of Oregon, College of Education.

Effective reading instruction can develop engaged readers who are knowledgeable, strategic motivated, and socially interactive. (1993, November) State of the Art: Reading. Retrieved 6/21/02 from www.ed.gov/pubs/StateArt/Read/idea2.html

Gambrell, L.B.(1996). Creating classroom cultures that foster reading motivation. The Reading Teacher, 50: 14-25.

Geimer, M., Getz, J., Pochert, T., & Pullam, K. (2000). Improving student achievement in language arts through implementation of multiple intelligences strategies. Unpublished Master's Action Research Project, Chicago, IL: Saint Xavier University and SkyLight Field-Based Master's Program.

Gross-Davis, B.(1999, December). Motivating students. Tools for Teaching.

Grossen, B. (1997). A synthesis of research on reading from the National Institute of Child Health and Human Development. Eugene, OR: University of Oregon.

Johnson, D. (1999). Balanced reading instruction: Review of literature. Naperville, IL: North Central Regional Educational Laboratory.

Kowalewski, K.D. (2001) Reading engagement: What influences the choice to read? Bloomington, IN: Indiana University, Beta Phi Mu.

Lane, C. (2001). Implementing multiple intelligences and learning styles in distributed learning/IMS projects. San Clemente, CA: The Education Coalition.

Laughlin, J. (1999). Multiple intelligences. Inquiry. 4 (2), 14-30.

Livingston, J.A.(1997). Metacognition: An overview. Buffalo, NY: State University of New York at Buffalo

Loria, W. (1999). Teaching to the multiple intelligences. Inquiry 4 (1), 13-15.

Lumsden, L. (1999). Motivating today's students: The same old stuff just doesn't work. Eugene, OR: University of Oregon, College of Education.

Lyon, G.R. (1999). Education research: Is what we don't know hurting our children? Washington D.C.: National Right to Read Foundation.

Modeling is an important form of classroom support for literacy learning.(1993). State of the Art: Reading:272.Retrieved 6/21/02 from www.ed.gov/pubs/StateArt/Read/idea4.html

Oral Reading: Most effective way to teach reading. (2000). The Plains, VA: The National Right to Read Foundation. Retrieved 1/14/2002 from www.nrrf.org/rdg-panel-rpt.htm.

Ransone, J. (2002). Reading comprehension strategies and EFF. Retrieved 7/ 23/02 from www.nifl.gov/nifl-4eff/2002/0083.html

Scalzo, G.(n.d.) Metacognition (metacomprehension) and strategic reading. Center For Literacy and Reading Instruction, New York: University at Buffalo

Strong, R., Silver, H.F., & Robinson, A. (1995, September). What do students want (and what really motivates them)? Educational Leadership.

What is the theory of multiple intelligences (MI)? (n.d.) Thirteen Ed Online.Retrieved 6/25/02 from www.thirteen.org/edonline/concept2class/month1

Torgesen, J.K.(1998, Spring/Summer). Catch them before they fall: Identification and assessment to prevent reading failure in young children. American Educator.

APPENDICES

APPENDIX A

PROJECT EXPECTATIONS

You must complete the following OVER THE COURSE OF THE NEXT 12 WEEKS:

At least 1 major project FOR EACH STORY-- EVERY TWO WEEKS (with the option of two for extra credit)

At least 4 minor projects FOR EACH STORY-- EVERY TWO WEEKS (CAN BE TAKEN FROM THE LIST POSTED ON THE MULTIPLE INTELLIGENCE BULLETIN BOARD)

video taped at least 4 times over the next twelve weeks

Do something on cassette tape at least 3 times over the next twelve weeks

Do a reflection at the conclusion of each story

Create a portfolio of all projects for the full twelve weeks

- separated by story and corresponding skills
- creative covers for each section (contest to follow)
- reflections included in each section

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- Checklist justification pages completed
- all pre and post tests included separately

APPENDIX B

Parent Survey

1. Does your child read independently without your encouragement?

Yes No Sometimes

2. Do you ever read with your child?

Yes No Sometimes

3. What type of reading material does your child like?
(books, magazines, etc.) _____

4. How often does your child visit the public library to check out additional reading material?

weekly monthly yearly never

5. Are books and magazines available in your home for your child to read on his or her own reading level?

Yes No

6. Are there particular topics or subjects that your child enjoys?
(Please list at least one)

_____

7. On a scale of 1-5, how much does your child enjoy reading?

1	2	3	4	5
Not at all	A Little Bit	Somewhat	Pretty Much	Very Much

8. On a scale of 1-5, how much do you as a parent, enjoy reading?

1	2	3	4	5
Not at all	A Little Bit	Somewhat	Pretty Much	Very Much

APPENDIX C

Plot Your Scores

100
90
80
70
60
50
40
30
20
10
0

Sec.1 Sec.2 Sec.3 Sec.4 Sec.5 Sec.6 Sec.7 Sec.8 Sec.9

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APPENDIX D

Criteria	1	2	3	4
Cover: Title, pictures, and words relate to	2 or more elements missing	2 elements missing and/or 1 unclear	1 element missing and/or 1 unclear	All elements complete and clear
Pre-tests/post-tests: Pre and post tests	2 or more missing in each area	2 missing in one or more areas	1 missing in each or 1 area	None missing
Story Artifacts: Includes all major and minor projects-content/style/ grammar.	2 or more projects missing in each area	2 projects missing and/or 1 unclear	1 project missing in any area and/or unclear	All projects complete and clear.
Audio-visual: Videotaped performances and cassette recordings	2 or more missing	2 missing	1 missing	All 7 complete and clear 4 video tapings 3 cassette recordings
Personal Choice: Clear organization and ideas; proofread	2 or more sections missing or completely out of order	2 sections missing and/or 1 unclear or out of order	1 section missing and/or unclear or out of order	All sections completed and in the correct order
Surveys: Multiple intelligence with graph and individual reading survey	2 or more missing	2 missing and/or 1 unclear	1 missing and/or 1 unclear	All complete and clear
Note: Point scale	1 = D	2 = C	3 = B	4 = A
Grading Scale:	0-28 = F	29-57 = D	58-86 = C	87-115 = B 116-141 = A
Portfolio Rubric	Darla Weaver	Tracey Tomaszewski	Jennifer Reidel	

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PORTFOLIO CHECKLIST & RUBRIC

CHECK WHEN COMPLETED		POINTS AWARDED
_____	Separated into seven sections (8 pts)	_____
_____	Reflection for each section (16 pts)	_____
_____	Two activities per intelligence (25 pts)	_____
_____	One evaluation per section (14 pts)	_____
_____	Neatly presented with quality Artifacts (6 pts)	_____
_____	Outline of oral presentation (25 pts)	_____
_____	Final reflection (6 pts)	_____
	Total score:	_____

District grading scale

92-100=A
83-91=B
74-82=C
65-73=D
0-64=F

Rubric grading scale

92-100=A
83-91=B
74-82=C
65-73=D
0-64=F

APPENDIX E

Project Completion Schedule

Name_____**Date** _____

Story_____

Week 1

_____ 1 major project (from MI folders)

_____ 2 minor projects (from list)

_____1._____

_____2._____

_____1 video tape

_____1 cassette tape

_____1 story reflection

Notes:_____

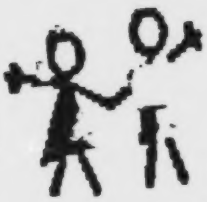
_____

_____

_____

_____

APPENDIX F



Minor Project Choices

1. Change the setting of the story you read. Tell how this change of setting would alter events and affect characters.

2. Make a test for the story you read. Include 10 true - false, 10 multiple choice and 10 short answer questions. (30 questions total). After writing the test, provide the answers for your questions.

3. Complete a series of five drawings that show five of the major events in the plot of the story you read. Write captions (conversations between the characters) for each drawing so that the illustrations can be understood by someone who did not read the story.

4. Design a movie poster for the story you read. Cast the major characters in the book with real actors and actresses. Include a scene or dialogue from the story on your poster. Remember, it should be persuasive; you want people to come see the movie.

5. Write a scene that could have happened in the story you read but didn't. After you have written the scene, explain how it would have changed the ending of the story.

6. Write a song for your story.

7. Write a diary as the main character would write it to explain the events of the story. You must have at least five entries.

8. If a journey was involved, draw a map with labels explaining significant places in the story.

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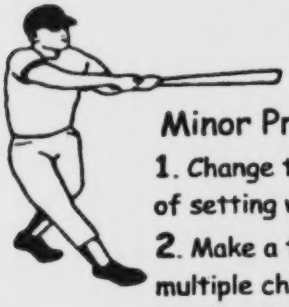


Minor Project Choices - "The Boonesville Bombers"

1. Change the setting of the story you read. Tell how this change of setting would alter events and affect characters.

2. Make a test for the story you read. Include 10 true - false, 10 multiple choice and 10 short answer questions. (30 questions total). After writing the test, provide the answers for your questions.

3. Write a song for your story. It must include the names of characters, setting, plot details as well as the ending. (A good idea would be to use a familiar tune such as "Twinkle, Twinkle Little Star", "Mary Had a Little Lamb" or "Jingle Bells") You will need to write your lyrics on paper as well as record your song on audio tape.

4. Write a letter from one character to another character. In your letter, you need to mention names of characters, the setting, plot details, as well as the ending of the story.

5. Write a different conclusion or ending to the story.

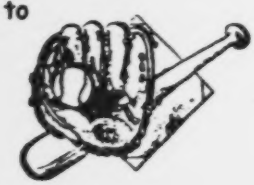
6. Write to the author of the story telling him or her what you liked about the story.

7. Pretend you are interviewing the main character. Write five questions you would ask the character along with the answers that the character would give in response to your questions. Your questions need to pertain to the events and characters in the story.

8. Pick out a part or scene in the story that shows that a character has changed his or her attitudes or ways of behavior.

9. Write a letter from one of the characters to a beloved grandparent or friend. Be sure to describe events in the story.

10. Make a collage of terms (words) and pictures related to baseball.



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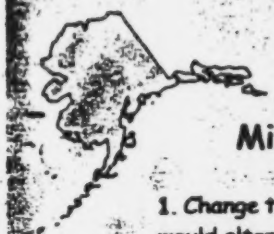

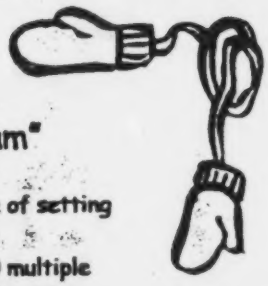

Minor Project Choices - "Iditarod Dream"

1. Change the setting of the story you read. Tell how this change of setting would alter events and affect characters.
2. Make a test for the story you read. Include 10 true - false, 10 multiple choice and 10 short answer questions. (30 questions total). After writing the test, provide the answers for your questions.
3. Write a song for your story. It must include the names of characters, setting, plot details as well as the ending. (A good idea would be to use a familiar tune such as "Twinkle, Twinkle Little Star", "Mary Had a Little Lamb" or "Jingle Bells") You will need to write your lyrics on paper as well as record your song on audio tape.
4. If a journey was involved, draw a map with labels explaining significant places in the story.
5. Write a letter from one character to another character. In your letter, you need to mention names of characters, the setting, plot details, as well as the ending of the story.
6. Write a different conclusion or ending to the story. Write something about Dusty not winning.
7. Write to the author of the story telling him or her what you liked about the story.
8. Pretend you are interviewing the main character. Write five questions you would ask the character along with the answers that the character would give in response to your questions. Your questions need to pertain to the events and characters in the story.
9. Write a letter from the dogs to Dusty. Be sure to describe events in the story.
10. Make a collage of terms (words) and pictures related to Alaska.

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APPENDIX G

Do a power point presentation on one of the following:

Women in Baseball

History of a famous stadium (i.e. Comisky Park, Wrigley Field, Soldier's Field)

Alison Cragin Herzig- the author of "Boonsville Bombers"

Be sure to include who, what, when, where, why, and how

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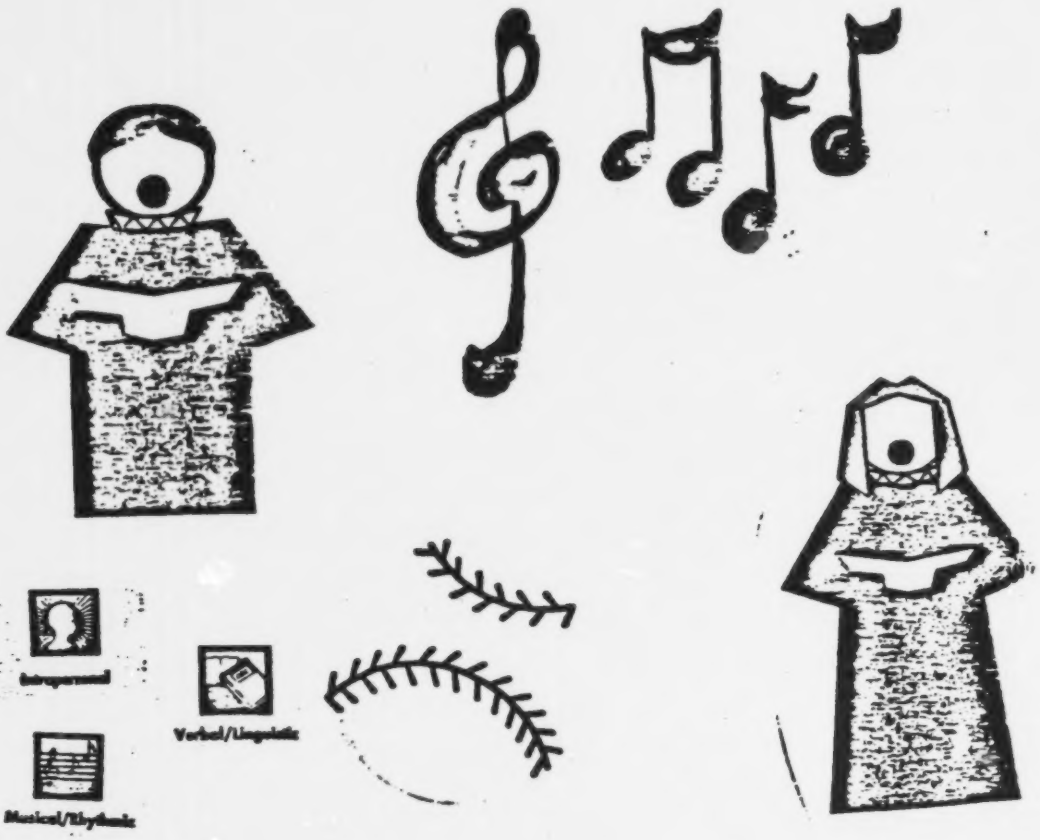
"Take Me Out to the Ball Game"

Learn the words and find the music to "Take Me Out to the Ball Game"

Sing it on tape (cassette or video)- include body movements and props!!!!

In a paragraph, draw conclusions as to why this song is so popular.



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Make a Brochure

Make a brochure on The American Red Cross!!

Directions:

Fold a white paper in 1/3 sections.

Include a title page on the front page.

Describe the organization Ex. When it was established and what they do

Include one example of ways they have helped in a big disaster

List a few ways you can contribute to The American Re Cross

Or

Do a brochure on Nicaragua.

Include a title page on the front

Describe the country

Describe the contributions Roberto Clemente had for Nicaragua

Describe the tragedy on December 23, 1972

Be sure to use your five senses to help write the rules. (Sight, touch, taste, hearing, and smell)

Visual/Spatial

Bodily/Kinesthetic

Logical/Mathematical

Verbal/Linguistic

Interpersonal

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Do a Debate !!

Do a debate on one of the following:

If Roberto Clemente was still alive would he have been voted into the Hall of Fame before the 5 year rule?

Or

Was it fair to lift the 5 year rule strictly on the basis of his death? (was he a great player or was it because he died?)

Choose a partner and takes opposite sides of the decided topic. This will take place outside on the blacktop. Make sure you and your partner thoroughly research reasons for and against the topic so the debate to persuade the class is clear. A reflection of the experience will follow.

Interpersonal

Verbal/Linguistic

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Design a Futuristic Baseball Field

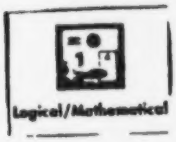
On paper, design a full color illustration of a baseball field in the future. Be sure to label the different areas. Also, give a brief summary of how teams would benefit from the new field and where would you choose to put it?

Visual/Spatial

Naturalist

Interpersonal

Verbal/Linguistic



Design a Game

Design a game dealing with safety rules of anything! Choose the sport or leisure activity that is of most interest to you or you and a partner. Be sure to include the following:

A full game board [get manilla folder from teacher]

Rules for the game

Directions for how to play the game

Game pieces

Object of the winning game [How]

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Tell a story about your personal role model. Be sure to include all of the details.

How does he/she make you feel? _____

What would you do to be a role model? _____

Verbal/Linguistic

Interpersonal

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Tell a story about a personal experience you have had with safety issues. Be sure to include all of the details.

How did you feel?

What would you have done differently?

Verbal/Linguistic

Interpersonal

Bodily/Kinesthetic

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Create a Map!!!!!

Create a map of the Caribbean. Be sure to include Puerto Rico and Nicaragua as well as the capitals of both cities. Also, write a summary describing the climate, scenery and location in comparison to Illinois.

Bodily/Kinesthetic

Logical/Mathematical

Naturalist

Make a commercial promoting The American Red Cross

As an individual or with a partner, make a commercial promoting The American Red Cross to inform the community or to collect donations. This will be a video taped activity.

Be sure to include:

Visuals listing how the organization has helped

Why the general public can benefit

A purpose for making a commercial for television (what is the importance of what you are trying to get across?)

Bodily/Kinesthetic

Logical/Mathematical

Visual/Spatial

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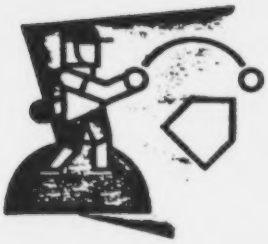

Verbal/Linguistic

Write a paragraph

After Roberto Clemente died the association agreed to wave the normal 5 year waiting period and voted Roberto into the Hall of Fame immediately. Draw a conclusion as to why the association voted this way.

or

How would Roberto Clemente have felt if he was still alive. Do you think this would have happened?

The paragraph must be at least 8 sentences

Bodily/Kinesthetic

"Think About It"

On page 139, choose one of the think about it questions and write a one page response and reflect on your personal beliefs or opinion.

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Find pictures of people in the newspaper and magazines that you feel represent those who make good judgments.

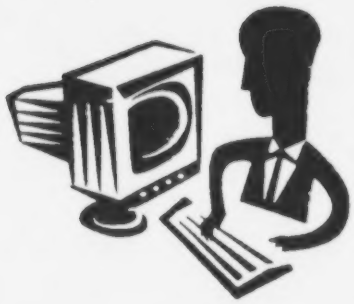
or

Focus on those that have made bad judgments. Whichever you choose, be sure to find at least three pictures and write a brief summary for each one describing the good or bad judgment they have made. (Please be sure to keep it appropriate.)

Verbal/Linguistic

Intrapersonal

Bodily/Kinesthetic



Do a power point presentation on one of the following:

Nicaragua

Roberto Clemente

Baseball Hall of Fame

Be sure to include who, what, when, where, why, and how

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WRITE A NEWSPAPER ARTICLE

Write a newspaper article using the facts and details on page 133 in the text about Roberto Clemente's person. (Make a tribute to Roberto Clemente)

It must be at least four paragraphs long

It answer the questions: who, what, when, where, why, and how

Or

Do a television news report on the earthquake in Nicaragua on December 23, 1972

or

Report on the death of Roberto Clemente on December 31, 1972

or

Report on the Nicaraguan or U.S. reaction to the earthquake or death of Roberto Clemente

Verbal/Linguistic

Bodily/Kinesthetic

Visual/Spatial

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Construct a Dog Sled

Using alternate resources, find details on dog sled construction and parts.

Drawing

or

actual model construction

Make sure you label the parts, list materials used, and include words from the story that helped in your design and construction.

After construction, pretend you are in a race and write a short story using transition words such as:
first, next, after, earlier, later, or finally

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Do a power point presentation on one of the following:

Iditarod's Race

-qualifications -place -pace runners keep
-route taken -responsibilities of handlers

Alaska

-climate -population -topography -location

Sled-dogs

-personality -qualities

Author

Include who, what, when, where, why, and how

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Become A Story Teller

Read the story into a tape recorder.

After reading the story silently, read the story out loud onto a cassette tape.

Reread the story every night out loud to practice. your parent or guardian will have to sign a log to show proof of completion.

After two weeks of practice, re-record the story out loud on the same cassette tape. Make sure you do not tape over or re-do any of the tapings.

Complete a sequence map of events.

Make sure you check for fluency, articulation, and voice inflection.

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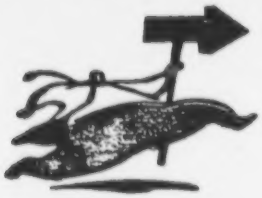
Steps Toward a Goal



What is your goal or hope for sixth grader?

Teams?

Clubs?

Instruments?

Create a chart to show the steps you are going to take to achieve your goals for sixth grade!!

Be sure to sequence the steps taken in the correct order.

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Baseball Game Memories

Think about the last time you were at a baseball game. Thoroughly describe the sights, sounds, smells, and tastes you experienced that day. Then write two paragraphs comparing and contrasting your experience to the story. Write one paragraph describing the similarities and one paragraph describing the differences. Each paragraph must be at least five sentences long. Be sure to check your grammar and spelling before doing a final copy.

You must also have some sort of visual to go with the written portion of the project. It may be a venn diagram, a t-chart, or graphic organizer. Be creative!!

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Visual/Spatial

Verbal/Linguistic

WRITE A NEWSPAPER ARTICLE

Write a newspaper article describing how the community felt about th e death of a child in the neighborhood.

It must be at least four paragraphs long

It answer the questions: who, what, when, where, why, and how

Or

Do a television news report as an individual or with a partner

Report an accident or a community reaction to an accident

Logical/Mathematical

Bodily/Kinesthetic

Interpersonal

BEST COPY AVAILABLE

Make a Safety Brochure

Make a safety brochure on safety rules or safety gear!!

Directions:

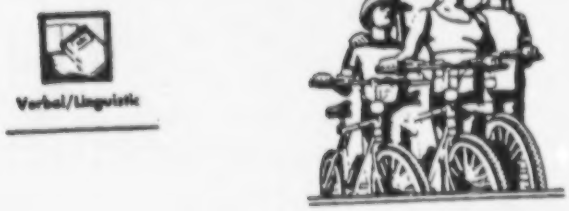
Fold a white paper in 1/3 sections.

Include a title page on the front page.

List safety rules or describe the safety gear.

Include pictures from the internet or illustrate them yourself

Be sure to use your five senses to help write the rules. (Sight, touch, taste, hearing, and smell)



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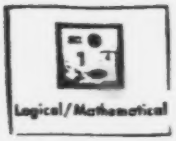
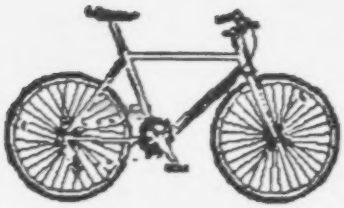


Design Some Safety Gear

Come up with an original design for safety gear of any kind. Be sure to include the following:

1. A full color illustration of the gear
2. An explanation of the changes made to improve the product
3. An explanation of why this product is a safer product to use (REALLY SELL IT!)



Write a Summary

Choose from the following summaries:

Write a summary of Mick Harte's thoughts that day

or

Write a summary about how Phoebe felt before and after the accident

or

Write a summary about how the family will cope over the years

Come up with a jingle for safety

Come up with a jingle, cheer, or rap to promote safety!

Be sure to include the rules for a specific sport, and reasons behind the rules

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Naturalist

Bodily/Kinesthetic

Design a Better Street System for Bikes

As a small group you will be taken outside to observe the sounds of traffic and the street layout for bicycle use

Decide what the safest route a cyclist can take, design the new layout for the street, and explain why this is a safer alternetive

Logical/Mathematical

Visual/Spatial

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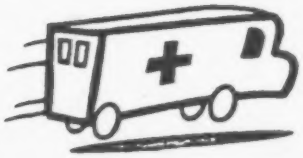
Make your own First Aid Kit!!!!

Include at least 5-8 items. Write what you included and why it is important to you. Be creative!!!!!!



Bodily/Kinesthetic

Verbal/Linguistic

Logical/Mathematical

Do a Debate !!

Do a debate on the issues of safety. You have two topics of debate to choose from:

Why wear safety gear?

Or

Should there be safety rules?

Choose a partner and takes opposite sides of the decided topic. This will take place outside on the blacktop. Make sure you and your partner thoroughly research reasons for and against the topic so the debate to persuade the class is clear. The class will then vote for or against the topic based on the reasons told to them. A reflection of the experience will follow.

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Make a commercial promoting safety or specific safety gear!

As an individual or with a partner, make a commercial promoting the need for safety rules or specific safety gear. This will be a video taped activity.

Be sure to include:

Visuals of gear or list of rules

Why the rules or gear are needed for safety

A purpose for making a commercial for television (what is the importance of what you are trying to get across?)

DESIGN A GAME

DESIGN A GAME DEALING WITH SAFETY RULES OF ANYTHING! CHOOSE THE SPORT OR LEISURE ACTIVITY THAT IS OF MOST INTEREST TO YOU OR YOU AND A PARTNER. BE SURE TO INCLUDE THE FOLLOWING:

A FULL GAME BOARD (GET MANILLA FOLDER FROM TEACHER)

RULES FOR THE GAME

DIRECTIONS FOR HOW TO PLAY THE GAME

GAME PIECES

OBJECT OF THE WINNING GAME (HOW)

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Look through the classifieds!!

Look through the classified section of the newspaper to find an advertisement for bicycles or sports equipment. Cut it out and design an advertisement poster to sell that item. Be sure to include:

The item you wish to sell in full illustration

Highlight the good points about the item

The cost of the item to be sold

Where to contact you if interested in purchasing the item

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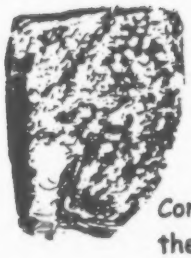

Reflection Page

Complete each of these eight ideas with material growing out of the story you read:

This story made me

wish that....

realize that....

decide that....

wonder about....

see that....

believe that....

feel that....

and hope that....

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Compare/Contrast Famous Players

Write a summary of the similarities and differences between two of your favorite baseball players!! Use page 159 of your textbook to help. Be sure to do the following:

--Pick a partner
--Choose two players
--Research players individually
--Compare and contrast using a venn diagram, chart, or graphic organizer with your partner. (make two copies)
--Independently write a two paragraph summary. One on the similarities and the other on the differences between the two players. Each sentence must be at least five sentences long.

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Do a power point presentation on one of the following:

Bicycle safety

Sport safety

Coping with death

Be sure to include who, what, when, where, why, and how

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